



OPINIONS OF MIDWIVES ABOUT CESAREAN BIRTH IN BURDUR PROVINCE

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ABSTRACT

The rate of births by cesarean section (CS) is on the rise globally. Turkish CS rate ranks first with 53.1% in the world. According to Burdur Provincial Health Directorate 2018 and 2019 statistics, 49.2% normal birth, and 50.8% CS rates are seen. This study was planned as a descriptive study in order to determine the deficiencies and suggestions of midwives working in Burdur about in-service trainings to reduce the CS rates.

The sociodemographic characteristics, professional experiences and participation in in-service training programs of the 112 midwives who were questioned, and their personal opinions and suggestions were evaluated. Most of the midwives participating in the study are between the ages of 39 -45 (n = 46, 41.1%) and their duration of professional experience is mostly 20 years and over (n = 69, 61.6%). While 46.4% of the participants find the cesarean birth-related trainings organized by the Provincial Health Directorate sufficient for them, 52.7% think that the trainings should be improved. When their opinions about the trainings given by the Ministry of Health were evaluated, 60% of the participants stated that the trainings were sufficient, while 40% stated that they should be improved.

We think that; reaching all personnel about multidisciplinary in-service trainings on issues such as counseling in prenatal care, providing maternity services and making appropriate interventions for safe delivery; increasing the practices to gain awareness of healthcare personnel and pregnant women; further during these practices, collaborating with the media, community organizations and associations will be effective in reducing CS rates.

Introduction

Cesarean delivery (CS), which is known to have positive effects on prenatal mortality and morbidity when medically necessary; does not show any benefit when it is not needed. Because of CS which can be described as an operation, complications may occur in terms of mother and baby during or after delivery, and future pregnancies of the mother may also be affected. These CS related risks are even more important for women who have difficulties about access to health care services (1).

CS is the most common surgery performed worldwide and its rates has been increasing day by day. The World Health Organization (WHO) yielded that the global cesarean rate as approximately 6% in 1990 and

19.1% in 2014. While the CS prevalence belows 20% in Northern Europe, it rises to 50% in Southeast Europe, China and South America (2). Turkey is one of the highest birth rates countries. The 2017 annual report of Organization for Economic Co-operation and Development (OECD) indicates that, Turkey ranks first in cesarean delivery in the world with 53.1%. Moreover, according to the 2003, 2008 and 2013 Turkey Demographic and Health Surveys (TDHS), CS rated 21.2%, 36.7%, and 48.1%, respectively (3). In the 2017 TDHS report, it is emphasized that the proportion of all CS in total hospital deliveries is 54.2%, and the primary CS pay for almost 26.2% (4). The Mediterranean Region of Turkey has the highest CS rate with 64%. The region with the highest rate of primary CS among all deliveries is Aegean Region with

31.7 percentage (4). According to Burdur Provincial Health Directorate 2018 and 2019 statistics, 49.2% normal birth and 50.8% cesarean delivery rates are seen. By focusing to decrease the rates of off-label cesarean section, World Health Organisation (WHO) recommends to make changes in the health care policies and to increase the accessibility and quality of antenatal care (3). For this purpose, an antenatal care guideline was published in 2016, on the basis of human rights. This guideline aims to reduce stillbirths and pregnancy complications, gain positive experiences of motherhood and improve the quality of antenatal care (5).

In Turkey, the Ministry of Health has effective health policies to reduce all CS rates, even if it is primary CS. "Prenatal Care Monitoring Protocol" is executed by the circular no: 2008/13. In this circular, risk assessment in pregnant, frequency of prenatal care visits and "Safe Motherhood Module" in-service trainings were discussed (6,7). Health institutions organize in-service trainings about reproductive health based on this

circular too. Some topics of this trainings are counseling in prenatal care, providing maternity service and making appropriate interventions for safe delivery (7). Ministry of Health and Turkish Society of Obstetrics and Gynecology has prepared a joint action plan, improved performance criterias and organized in-service trainings for health care workers. These efforts aim to decrease the high cesarean rate, and make the right delivery choice in accordance with medical requirements. Regarding this, antenatal education programmes have been activated in hospitals and community health centers (3).

The feedback of midwives who work actively in the field regarding the in-service training provided is valuable. Because these feedbacks will be a guide for new planning. Therefore, there is a need for evaluation of in-service training. This study was planned to determine the deficiencies and suggestions of midwives working in Burdur about in-service training to reduce the CS rates.

Table 1. Sociodemographic Characteristics of Participants

| Age Group (year) | n | % |
|---|-----|-------|
| 18-24 | | |
| 25-31 | 9 | 8,0 |
| 32-38 | 19 | 17,0 |
| 39-45 | 46 | 41,1 |
| 46 and over | 38 | 33,9 |
| Graduation | | |
| High School | 5 | 4,5 |
| Associate's Degree | 39 | 34,8 |
| University/Master's Degree | 68 | 60,7 |
| Working Location | | |
| District Health Directorates | 51 | 45,5 |
| Family Medicine Units/ Community Health Centers | 61 | 54,5 |
| Midwifery Experience (year) | | |
| 0-5 | 3 | 2,7 |
| 6-10 | 11 | 9,8 |
| 11-20 | 29 | 25,9 |
| 20 and over | 69 | 61,6 |
| Total | 112 | 100,0 |

Method

Our descriptive type of study was carried out in Burdur between May 15th and June 15th 2019. The population of interest was 119 midwives working in the primary health care institutions of Burdur Province. A total of 112 (94,1%) midwives who could be reached constituted the sample of the study. The data were collected by a questionnaire containing open and closed-ended questions. The participants' socio-demographic characteristics, professional experiences, participation in in-service training programs, personal opinions and suggestions were included in our questionnaire. Then, total data were analyzed using SPSS 17.0 package program. The number and percentage for nominal variables and mean Standard deviation for numeric variables were provided within the definitive statistics.

Findings

The rates of participation in normal birth during education (n = 85, 75.9%) and occupational life (n = 66, 58.9%) are in the "0-50 birth" group. 15.1% of participants stated that the training they received during their education was inadequate (n=17). While 46.4% of the participants find the cesarean birth-

related training organized by the Provincial Health Directorate sufficient for them, 52.7% think that the training should be improved. When their opinions about the training given by the Ministry of Health were evaluated, 60% of the participants stated that the training was sufficient, while 40% stated that they should be improved.

According to 8.9% of the participants, the medical devices and physical conditions related to the birth process in the working environment were sufficient. However, the rate of "partially sufficient" was 65.2% and "insufficient" was 25.9% percent of all. The experiences of the participants about the pregnancy and delivery process, the evaluation of their training, and the working environment are shown in Table 2.

The midwives included in the study were asked what could be done to decrease the rate of CS and their opinions were taken. Notably, out of a total of personal opinions and suggestions (n=79) collected, increasing pregnancy information and awareness training (n=53, 67%) came first. Planning legal sanctions against the physicians (n=7, 8.9%) and increasing physician's support for vaginal delivery (n=5, %6.3), more media support (not publishing negative stories,

Table 2. Evaluation of Participants on Pregnancy and Delivery Process

| Participation in Normal Birth | Number of Birth | | | Total n (%) |
|--|-----------------|--------------------------|-------------------|-------------|
| | 0-50 n (%) | 51-100 n (%) | 101 andover n (%) | |
| During Education | 85 (75,9) | 19 (17,0) | 8 (7,1) | 112 (100,0) |
| Occupational Life | 66 (58,9) | 18 (16,1) | 28 (25,0) | |
| Evaluation of Trainings | Adequate n (%) | Partially Adequate n (%) | Inadequate n (%) | Total n (%) |
| During Midwifery Education | 63 (56,3) | 32 (28,6) | 17 (15,1) | 112 (100,0) |
| Organized by the Provincia lHealth Directorate (Normal Delivery) | 46 (41,0) | 31 (27,7) | 35 (31,3) | |
| Organized by the Provincial Health Directorate (CS) | 52 (46,4) | 1 (0,9) | 59 (52,7) | |
| Organized by the Ministry of Health | 36 (60,0) | 23 (38,4) | 1 (1,7) | 60 (100,0) |
| Working Environment | | | | |
| Medical Devices and Physical Conditions | 10 (8,9) | 73 (65,2) | 29 (25,9) | 112 (100,0) |

Tablo 3. Participants' Opinions and Suggestions to Reduce CS rates.

| Opinions/Suggestions | n | % |
|---|-----------|------------|
| Increase pregnancy in formation and awareness trainings | 53 | 67 |
| Legal sanctions against physicians | 7 | 8,9 |
| Increase physicians's support for normal delivery | 5 | 6,3 |
| Media support | 5 | 6,3 |
| Change/Innovation in midwifery education | 3 | 3,8 |
| Change in midwifery job description | 2 | 2,5 |
| More in-service training for physicians | 2 | 2,5 |
| Elimination of working environment deficiencies | 1 | 1,3 |
| Investigation of private hospitals | 1 | 1,3 |
| Total | 79 | 100 |

publishing encouraging posts, advertisements, public spots) (n=5, %6.3), change or innovation in midwifery education (promote quality, practice, and duration of the internship) (n=3, 3.8%) are suggested. These opinions are summarized in Table 3.

Discussion

According to the 2018 statistics of Burdur Provincial Health Directorate, the number of babies born in Burdur is 1858. If the classification is made according to the type of birth; 49.2% normal delivery and 50.8% CS rates are seen. The percentage of primary cesarean deliveries out of all CS is 18.4%. According to 2018 data in Burdur, the most common indications for CS include previous uterine surgery (62.50%), cephalopelvic disproportion (13.77%), fetal distress (8.47%), fetal malpresentation (6.36%), prolonged labor (%4.89), hypertensive disorders of pregnancy (2.22%). In 2019 statistics, the number of babies born in Burdur Province hospitals was stated as 1818 but there were no remarkable differences for the type of delivery in 2019. According to 2019 data in Burdur, the most common indications for CS include, previous uterine surgery (57.07%), prolonged labor (11.87%), cephalopelvic disproportion (10.68%), fetal malpresentation (8.41%), fetal distress. (7.55%), hypertensive disorders of pregnancy (1.83%).

Some potential factors influence increased CS rates. Physicians' fears of malpractice lawsuits, inability of

painless birth (with epidural anesthesia) commonly, inadequate midwife care and the wide CS indications are listed as examples (8). In addition to medical factors, the lack of trust between the physician, patient and the healthcare system also increases CS rates (9). Another factor that causes this increase is social reasons. Because social reasons can change women's attitudes towards the type of delivery. Despite positive cesarean delivery histories, some social and cultural information such as negative vaginal birth stories direct pregnant to elective CS (10).

In many underdeveloped and developing countries, CS rates are low in rural areas due to lack of healthcare facilities, but CS rates in urban areas are increasing day by day. Even so, WHO pointed that every effort should be made to perform cesarean delivery for every woman in medical need, regardless of the CS rates. At the same time, WHO states that CS rate of more than 10-15% will affect maternal and perinatal outcomes negatively. It is already known that increased CS rates are associated with maternal and perinatal short- and long-term outcomes (2,8,11).

It has been proven that CS rates are associated with maternal deaths in the United States. Similarly, it has been reported that CS is associated with maternal and neonatal deaths due to insufficient healthcare services in African countries. Due to CS, intraoperative complications such as anesthetic and urological

complications may occur. Bladder damage is the most frequent intraoperative injury and pulmonary aspiration is one of the most important anesthetic complications. Maternal morbidity and mortality caused by bleeding, infection and thromboembolism may increase. In addition, CS adversely impacts future pregnancies. Abnormal development of the placenta can be seen, which can cause spontaneous preterm labor, uterine rupture, excessive maternal bleeding, and even hysterectomy. On the other hand, respiratory distress due to iatrogenic preterm birth may occur in newborn and more autoimmune problems and obesity may be encountered. Due to all reasons that make maternal and infant health difficult, it is recommended to reduce the rates of cesarean out-of-indications (2,8,12,13,14).

According to the literature; directing hospitals and healthcare professionals to normal births with financial incentives, "mother baby friendly hospital" initiatives in all health care services, training and childbirth preparation classes, and standard protocols may achieve to decrease CS rates. Notably, it is known that there will be a significant decrease in CS rates with midwife-supported care, birth companions of women in labor, effective emotional support, good pain management, meaningful dialogue, more privacy and labor care (2,15).

Until 2019, the number of Family Physicians who have completed the "Reproductive and Sexual Health Modular Training" in Burdur is 80 (92%), and the number of Family Health Staff is 77 (95%). At the end of 2020, the targeted value for both groups is reported as 100%, the number of trainings required to reach this value is 9, and the required time is 3 years.

In Burdur, pregnant classes are active in hospitals and community health centers to train pregnant women to gain knowledge and awareness. According to the provincial data; 2865 pregnant women were identified in 2018. Totally, 3157 training sessions were carried out in pregnant classes. 2244 (71.08%) sessions were in community health centers and 913 (28.92%) were in hospitals. In 2019, the number of pregnant women detected was reported as 1419. The total number of

training sessions was 1292,535 (41.41%) of these trainings were carried in hospitals and 757 (58.59%) in community health centers.

Healthcare professionals can't reverse the worldwide trend towards cesarean delivery alone. Other health-related professionals such as health organizations, women's organizations, and insurances, which will cooperate with government institutions, can take joint actions too (2).

Conclusion

We think that; reaching all personnel about multidisciplinary in-service trainings on issues such as counseling in prenatal care, providing maternity services and making appropriate interventions for safe delivery; increasing the practices to gain awareness of healthcare personnel and pregnant women; further during these practices, collaborating with the media, community organizations and associations will be effective in reducing cesarean birth rates.

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References

1. World Health Organization. Statement on caesarean section rates. Switzerland: 2015.
2. Visser GHA, Ayres-de-Campos D, Barnea ER, de Bernis L, Di Renzo GC, Vidarte MFE, Lloyd I, Nassar AH, Nicholson W, Shah PK, Stones W, Sun L, Theron GB, Walani S. FIGO position paper: how to stop the caesarean section epidemic. *Lancet*. 2018 Oct 13;392(10155):1286-1287. doi: 10.1016/S0140-6736(18)32113-5. PMID: 30322563.
3. Til A, Bostanci M. The effect of structured delivery preparation education on birth preference. *Int J Gynecol Obstet*. 2021;00:1-7. <https://doi.org/10.1002/ijgo.13569>
4. Republic of Turkey Ministry of Health General Directorate of Health Information Systems. Health statistics yearbook 2017. Ankara: 2018. Available at: <https://dosyasb.saglik.gov.tr/Eklenti/30148.ingilizcesiydijiv1pdf.pdf?0>
5. World Health Organization. Recommendations on Antenatal Care for a Positive Pregnancy Experience. Geneva: 2016. PMID: 28079998.
6. Republic of Turkey Ministry of Health General Directorate of Public Health. Prenatal care monitoring protocol circular 2008/13. Turkey: 2008 Feb 19. Available at: <https://www.saglik.gov.tr/TR.11104/dogum-oncesi-bakim-izlem-protokolunu-genelgesi-2008--13.html> (in Turkish)
7. Republic of Turkey Ministry of Health General Directorate of Mother and Child Health / Family Planning. Reproductive health programme of Turkey: sexual health and reproductive health service standards. Turkey: 2007. Available at: <https://sbu.saglik.gov.tr/Ekutuphane/kitaplar/a%C3%A7sap39.pdf> (in Turkish)

8. Republic of Turkey Ministry of Health General Directorate of Mother and ChildHealth / Family Planning. Labor and caesarean section management guide. Turkey: 2010. Available at: <https://kalite.saglik.gov.tr/Eklenti/6407/0/dogum-ve-sezaryen-eylemi-yonetim-rehberipdf.pdf> (in Turkish)
9. Eskicioğlu F, Hasdemir P, Çelik H, Koyuncu F. Sağlık politikalarının, hekimlerin sezeryan kararı almalarında etkisi: ikinci basamak sağlık kuruluşu değerlendirilmesi. Pam Med J. 2014;2:119-123.
10. Betrán AP, Temmerman M, Kingdon C, Mohiddin A, Opiyo N, Torloni MR, Zhang J, Musana O, Wanyonyi SZ, Gülmezoğlu AM, Downe S. Interventions to reduce unnecessary caesarean sections in healthy women and babies. Lancet 2018 Oct13;392(10155):1358-1368. doi:10.1016/s0140-6736(18)31927-5
11. Molina G, Weiser TG, Lipsitz SR, Esquivel MM, Uribe-Leitz T, Azad T, Shah N, Semrau K, Berry WR, Gawade AA, Haynes AB. Relationship between cesarean delivery rate and maternal and neonatal mortality. JAMA 2015 Dec01;314(21):2263-2270. doi:10.1001/jama.2015.15553
12. Munro S, Kornelsen J, Hutton E. Decision making in patient-initiated elective cesarean delivery: the influence of birth stories. J Midwifery Womens Health. 2009 Sep-Oct;54(5):373-379. doi: 10.1016/j.jmwh.2008.12.014. PMID: 19720338.
13. Tarney CM. Bladder injury during cesarean delivery. Curr Womens Health Rev. 2013 May;9(2):70-76. doi: 10.2174/157340480902140102151729.
14. Borkar V, Upadhye JJ. Anesthetic complications in cesarean section. Int J Res Med Sci. 2018 Oct;6(10). doi:10.18203/2320-6012.ijrms20183849
15. Demirbas M, Karabel MP, Inci MB. Changing rates of cesarean section in Turkey and in the world and probable causes. Sakarya Med J. 2017;7(4):158-163 doi:10.31832/smj